

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method of treating a condition selected from a pancreatic disease, obesity, metabolic syndrome, a metabolic disease, or metabolic dysfunction in a patient in need of such treatment, comprising administering pharmaceutical composition an effective amount of an agent comprising a polypeptide which is at least 85% identical to a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 protein and/or a functional fragment thereof, and/or a nucleic acid molecule encoding a polypeptide which is at least 85% identical to a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 protein and/or a functional fragment thereof and/or effector/modulator of said nucleic acid molecule and/or said protein or protein fragment, to the patient.
2. (Currently Amended) ~~The composition~~ The method of claim 1, wherein the ~~composition contains~~ agent is administered with pharmaceutically acceptable carriers, diluents, and/or additives.
3. (Currently Amended) ~~The composition~~ The method of claim 1, wherein the nucleic acid molecule is a mammalian ~~SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13~~ nucleic acid, encoding the human ~~SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13~~ polypeptide and/or a nucleic molecule, which is complimentary thereto ~~or a fragment thereof or a variant thereof.~~
4. (Currently Amended) ~~The composition~~ The method of claim 1, wherein said nucleic acid molecule is selected from the group consisting of

- a. A nucleic acid molecule encoding a ~~polypeptide as shown in Table 2~~ SEQ ID NO: 31 or SEQ ID NO:33, or an isoform, ~~fragment, or variant of the polypeptide as shown in table 2 thereof~~;
 - b. A nucleic acid molecule which comprises ~~or is the nucleic acid molecule as shown in Table 2~~ SEQ ID NO:30 or SEQ ID NO:32;
 - c. a nucleic acid molecule ~~being degenerate with~~ the nucleic acid sequences as defined in a. or b. as a result of the genetic code ~~to the nucleic acid sequences as defined in a. or b.~~;
 - d. a nucleic acid molecule that hybridizes at 50°C in a solution containing 1 x SSC and 0.1% SDS to a nucleic acid molecule as defined in claim 3 or as defined in (a) to (c) and/or a nucleic acid molecule which is complimentary thereto;
 - e. a nucleic acid molecule that encodes a polypeptide which is at least 85%, ~~preferably at least 90%, more preferably at least 95%, more preferably at least 98% and up to 99.6%~~ identical to the human SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, ~~or SF13~~ or to a polypeptide as defined in (a); and
 - f. a nucleic acid molecule that differs from the nucleic acid molecule of (a) to (e) by mutation and wherein said mutation causes an alteration, deletion, duplication, or premature stop in the encoded polypeptide.
5. (Currently Amended) ~~The composition~~ The method of claim 1, wherein the nucleic acid molecule is a DNA molecule.
6. (Currently Amended) ~~The composition~~ The method of claim 1, wherein said nucleic acid encodes a polypeptide contributing to regulating the metabolism, ~~in particular human metabolism.~~

7. (Currently Amended) ~~The composition~~ The method of claim 1, wherein the nucleic acid molecule is a recombinant nucleic acid molecule.
8. (Currently Amended) ~~The composition~~ The method of claim 1, wherein the nucleic acid molecule is a vector.
9. (Currently Amended) ~~The composition~~ The method of claim 1, wherein the polypeptide is a recombinant polypeptide.
10. (Currently Amended) ~~The composition~~ The method of claim 9, wherein said recombinant polypeptide is a fusion polypeptide.
11. (Currently Amended) ~~The composition~~ The method of claim 9, wherein said nucleic acid molecule is ~~selected from hybridization probes, primers, and anti-sense oligonucleotides~~ a hybridization probe.

Please cancel claims 12-18.

19. (Currently Amended) ~~The composition~~ The method of claim 18 1, for ~~administration together with~~ further comprising the step of administering at least one other pharmaceutical agent suitable for the treatment or prevention of pancreatic diseases and/or obesity and/or metabolic syndrome.
20. (Currently Amended) ~~The composition~~ The method of claim 18, for ~~administration together with~~ further comprising the step of administering at least one other pharmaceutical agent which has an immunosuppressive activity.

Please cancel claims 21 and 22.

23. (Withdrawn) Use of a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 nucleic acid molecule or a polypeptide encoded thereby or a fragment or a variant of said nucleic acid molecule or said polypeptide and/or an effector/modulator of said nucleic acid or polypeptide for the manufacture of a medicament for the treatment of pancreatic diseases (e.g. diabetes such as insulin dependent diabetes mellitus or non insulin dependent diabetes mellitus), obesity, metabolic syndrome and/or other metabolic diseases or dysfunctions for controlling the function of a gene and/or a gene product which is influenced and/or modified by a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide.

24. (Withdrawn) Use of a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 nucleic acid molecule or use of a polypeptide encoded thereby, or use of a fragment or a variant of said nucleic acid molecule or said polypeptide, or use of an effector/modulator of said nucleic acid molecule or said polypeptide for identifying substances capable of interacting with a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide in vitro and/or in vivo.

25. (Withdrawn) A non-human transgenic animal exhibiting a modified expression of a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide.
26. (Withdrawn) The animal of claim 25, wherein the expression of the SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide is increased and/or reduced.
27. (Withdrawn – Previously Presented) A recombinant host cell exhibiting a modified expression of a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide, or a recombinant host cell which comprises a nucleic acid molecule as defined in claim 1.
28. (Withdrawn) The cell of claim 27 which is a human cell.
29. (Withdrawn) A method of identifying a (poly)peptide involved in the regulation of energy homeostasis and/or metabolism in a mammal comprising the steps of
- (a) contacting a collection of (poly)peptides with a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 homologous polypeptide or a fragment thereof under conditions that allow binding of said (poly)peptides;
 - (b) removing (poly)peptides which do not bind and

(c) identifying (poly)peptides that bind to said SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 homologous polypeptide.

30. (Withdrawn) A method of screening for an agent which effects/modulates the interaction of a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide with a binding target comprising the steps of

- (a) incubating a mixture comprising
 - (aa) a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide or a fragment thereof;
 - (ab) a binding target/agent of said SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide or fragment thereof; and
 - (ac) a candidate agent under conditions whereby said polypeptide or fragment thereof specifically binds to said binding target at a reference affinity;
- (b) detecting the binding affinity of said SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide or fragment thereof to said binding target to determine an affinity for the agent; and
- (c) determining a difference between affinity for the agent and reference affinity.

31. (Withdrawn) A method for screening for an agent, which effects/modulates the activity of a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, F10, SF11, SF12, or SF13 polypeptide, comprising the steps of

- (a) incubating a mixture comprising
 - (aa) a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide or a fragment thereof; and
 - (ab) a candidate agent under conditions whereby said SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide or fragment thereof exhibits a reference activity,
- (b) detecting the activity of said SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 polypeptide or fragment thereof to determine an activity for the agent; and
- (c) determining a difference between activity for the agent and reference activity.

32. (Withdrawn – Previously Presented) A method of producing a composition comprising mixing the (poly)peptide identified by the method of claim 29 with a pharmaceutically acceptable carrier and/or diluent.

33. (Withdrawn) The method of claim 32 wherein said composition is a pharmaceutical composition for preventing, alleviating or treating of diseases and disorders, including pancreatic diseases (e.g. diabetes), obesity, and/or metabolic syndrome.

34. (Withdrawn – Previously Presented) Use of a (poly)peptide as identified by the method of claim 29 for the preparation of a pharmaceutical composition (i) for the treatment, alleviation and/or prevention of pancreatic diseases (e.g. diabetes), obesity, and/or metabolic syndrome, (ii) for the modulation of pancreatic development and/or (iii) for the regeneration of pancreatic cells or tissues.

35. (Withdrawn – Previously Presented) Use of a nucleic acid molecule as defined in claim 1 for the preparation of a medicament (i) for the treatment, alleviation and/or prevention of diseases or dysfunctions, including pancreatic diseases (e.g. diabetes), obesity, and/or metabolic syndrome, (ii) for the modulation of pancreatic development and/or (iii) for the regeneration of pancreatic cells or tissues.

36. (Withdrawn – Previously Presented) Use of a polypeptide as defined in claim 1 for the preparation of a medicament (i) for the treatment, alleviation and/or prevention of pancreatic diseases (e.g. diabetes), obesity, and/or

metabolic syndrome, (ii) for the modulation of pancreatic development and/or (iii) for the regeneration of pancreatic cells or tissues.

37. (Withdrawn) Use of a vector as defined in claim 8 for the preparation of a medicament (i) for the treatment, alleviation and/or prevention of pancreatic diseases (e.g. diabetes), obesity, and/or metabolic syndrome, (ii) for the modulation of pancreatic development and/or (iii) for the regeneration of pancreatic cells or tissues.

38. (Withdrawn – Previously Presented) Use of a host cell as defined in claim 27 for the preparation of a medicament (i) for the treatment, alleviation and/or prevention of pancreatic diseases (e.g. diabetes), obesity, and/or metabolic syndrome, (ii) for the modulation of pancreatic development and/or (iii) for the regeneration of pancreatic cells or tissues.

39. (Withdrawn) Use of a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 nucleic acid molecule or of a fragment thereof for the production of a non-human transgenic animal which over- or under-expresses the SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 gene product.

40. (Withdrawn) Kit comprising at least one of

- (a) a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 nucleic acid molecule or a functional fragment or an isoform thereof;
- (b) a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 amino acid molecule or a functional fragment or an isoform thereof;
- (c) a vector comprising the nucleic acid of (a);
- (d) a host cell comprising the nucleic acid of (a) or the vector of (b);
- (e) a polypeptide encoded by the nucleic acid of (a), expressed by the vector of (c) or the host cell of (d);
- (f) a fusion polypeptide encoded by the nucleic acid of (a);
- (g) an antibody, an aptamer or another effector/modulator against the nucleic acid of (a) or the polypeptide of (b), (e), or (f) and/or 5
- (h) an anti-sense oligonucleotide of the nucleic acid of (a).

41. (Withdrawn) A method of producing a composition comprising mixing the agent identified by the method of claim 30 with a pharmaceutically acceptable carrier and/or diluent.

42. (Withdrawn) Use of an agent as identified by the method of claim 30 for the preparation of a pharmaceutical composition (i) for the treatment, alleviation and/or prevention of pancreatic diseases (e.g. diabetes), obesity, and/or metabolic syndrome, (ii) for the modulation of pancreatic development and/or (iii) for the regeneration of pancreatic cells or tissues.

Please enter new claims 43-50

43. (New) The method of claim 1, wherein the condition is pancreatic disease.
44. (New) The method of claim 43, wherein the pancreatic disease is selected from the group consisting of insulin dependent diabetes mellitus and non-insulin dependent diabetes mellitus.
45. (New) The method of claim 1, wherein said nucleic acid encodes a polypeptide contributing to regulating human metabolism.
46. (New) The method of claim 9, wherein said nucleic acid molecule is a primer.
47. (New) The method of claim 9, wherein said nucleic acid molecule is an anti-sense oligonucleotide.
48. (New) The method of claim 4, wherein the nucleic acid molecule is a nucleic acid molecule that encodes a polypeptide which is at least 90% identical to a human SF06 polypeptide.
49. (New) The method of claim 4, wherein the nucleic acid molecule is a nucleic acid molecule that encodes a polypeptide which is at least 95% identical to a human SF06 polypeptide.
50. (New) The method of claim 4, wherein the nucleic acid molecule is a nucleic acid molecule that encodes a polypeptide which is at least 99.6% identical to a human SF06 polypeptide.

51. (New) A method of modulating pancreatic development, comprising administering an agent comprising an effective amount of a SF06 protein and/or a functional fragment thereof, and/or a nucleic acid molecule encoding a SF06 protein and/or a functional fragment thereof and/or effector/modulator of said nucleic acid molecule and/or said protein or protein fragment, to a mammal in need thereof.

52. (New) A method of regenerating pancreatic cells or pancreatic tissues, comprising administering an agent comprising an effective amount of a SF06 protein and/or a functional fragment thereof, and/or a nucleic acid molecule encoding a SF01, SF02, SF03, SF04, SF05, SF06, SF07, SF08, SF09, SF10, SF11, SF12, or SF13 protein and/or a functional fragment thereof and/or effector/modulator of said nucleic acid molecule and/or said protein or protein fragment, to a mammal in need thereof.

53. (New) The method of claim 52, wherein said method is a method of regenerating pancreatic beta cells.

54. (New) A method for diagnosing a condition selected from pancreatic diseases, obesity, metabolic syndrome, or metabolic diseases or metabolic dysfunction, comprising

combining a body fluid or cell extract taken from a mammal with an antibody of a SF06 protein under conditions suitable for formation of a complex between said antibody and a SF06 protein;

quantifying the formation of complexes between said antibody and said protein to generate a value representing the quantity of the protein expressed in the mammal;

comparing said value representing the quantity of the protein expressed in the mammal to a reference value to determine if the mammal is afflicted with a pancreatic disease, obesity, metabolic syndrome, metabolic disease, or metabolic dysfunction.

55. (New) A method for diagnosing a condition selected from pancreatic diseases, obesity, metabolic syndrome, or a metabolic diseases or metabolic dysfunction, comprising

combining a nucleic acid molecule encoding a SF06 protein and/or a functional fragment thereof and/or effector/modulator of said nucleic acid molecule with a fluid or tissue sample from a mammal under conditions suitable for the formation of a hybridization complex to generate hybridization complexes;

quantifying said complexes to generate a value representing the expression of the nucleic acid in the patient, and

comparing said value to a reference value to determine if the mammal is afflicted with a pancreatic disease, obesity, metabolic syndrome, a metabolic disease, or metabolic dysfunction.